

1644 #15
10/15

1600

RAW SEQUENCE LISTING

DATE: 10/16/2002

PATENT APPLICATION: US/09/725,324A

TIME: 16:25:27

Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF4\10162002\I725324A.raw

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OCT 25 2002

P.6 TECH CENTER 1600/2900

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4 <110> APPLICANT: Leong, Steven R.
5   Punnonen, Juha
7 <120> TITLE OF INVENTION: CYTOKINE POLYPEPTIDES AND NUCLEIC ACIDS
10 <130> FILE REFERENCE: 02-108010US
C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/725,324A
C--> 12 <141> CURRENT FILING DATE: 2000-11-28
12 <150> PRIOR APPLICATION NUMBER: 60/169,035
13 <151> PRIOR FILING DATE: 1999-12-02
15 <160> NUMBER OF SEQ ID NOS: 44
17 <170> SOFTWARE: FastSEQ for Windows Version 4.0
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 975
21 <212> TYPE: DNA
22 <213> ORGANISM: Artificial Sequence
24 <220> FEATURE:
25 <223> OTHER INFORMATION: Synthetic Sequence
27 <400> SEQUENCE: 1
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29 atggccatat gggaactgaa gaaagacgtt tatgtcgtag agttggactg gtatcctaata 120
30 gctcctggag aaacagtggg cctcacgtgt gacactcctg aagaagatgg catcacctgg 180
31 acctcagacc agagcagtga ggtcttgggg actggcaaaa ccctgaccat ccacgtcaaa 240
32 gagtttggag atgctggcca gtacacctgt cgcaaaggag gcgaggctct gagtcgttca 300
33 ctctcctctg tgcacaaaaa ggaagatgga atttggtcca ctgatatttt aaaagaccag 360
34 aaagagccca aaaacaagag ctttctaaaa tgtgaggcaa agaattactc cggacgtttc 420
35 acctgctggt ggctgacgac aatcagtact gatttgaaat tcagtgtcaa aagcagcaga 480
36 ggctccactg acccccgtgg cgtgacatgt ggcacggcaa cgctctcaga ggacctcgga 540
37 gagtataaga agtacagagt ggagtgtcag gagggcagtg cctgcccagc cgctgaggag 600
38 agcctgcccc ttgaggtcgt gctggaagct gttcacaagc tcaagtatga aaactacacc 660
39 agcagcttct tcatcagaga catcatcaaa ccagaccac ccaagaacct gcaactgaag 720
40 ccattgaaaa atttctcgga tgtggagggt agctgggggt accccgacac ctggagcacc 780
41 ccacattcct acttctccct gacattctgc atccaggtcc agggcaagag caagagagaa 840
42 aagaaagata gaattctcac agacaagacc tcagccacgg tcatctgccg caaaaatgcc 900
43 aagatccgcg tgcaagcccg ggaccgctac tacagctcat tctggagtga atgggcattc 960
44 gtgtcctgca gtttag
46 <210> SEQ ID NO: 2
47 <211> LENGTH: 984
48 <212> TYPE: DNA
49 <213> ORGANISM: Artificial Sequence
51 <220> FEATURE:
52 <223> OTHER INFORMATION: Synthetic Sequence
54 <400> SEQUENCE: 2
55 atgtgccacc agcagttggt catctcttgg ttttccctgg ttttctggc atctccctc 60
56 gtggccatat gggaactgga gaaaaacgtc tatgtttag aattggactg gtaccggat 120

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57 gcccctggag aaatggtggt cctcgctgt gacactcctg aagaagatgg catcacctgg 180
58 acctcagacc agagcagtga ggtcttgggc actggcaaaa ccctgaccat ccacgtcaaa 240
59 gagtttggag atgctggcca gtacacctgt cgcaaaggag gcgcagttct gagccagtca 300
60 ctctgtctgc ttcacaaaaa ggaagatgga atttgggtcca ctgatatttt aaaagaccag 360
61 aaagagccca aaaacaagag ctttctaata tgtgaggcaa agaattactc cggacgtttc 420
62 acctgctggt ggctgacaac aatcagtact gatttgaaat tcagtgtcaa aagcagcaga 480
63 ggctcctctg acccccagag ggtgacgtgc ggagcagcgt tgctctcagc agagaaggtc 540
64 agcttgagagc atagggagta taagaagtac agagtggagt gtcaggaggg cagtgcctgc 600
65 ccagccgctg aggagagcct gccattgag gtcgtgctgg aagctgttca caagctcaag 660
66 tatgaaaact ataccagcag cttcttcac agggacatca tcaaaccgga cccacccaag 720
67 aacctgcaac tgagaccact aaagaattct cggcaggtgg aggtcaactg ggagtaccct 780
68 gacacgtgga gcaccccaca ttctacttc tccctgacgt tttgtgttca ggtccaggga 840
69 aagaacaaga gagaaaagaa actcttcacg gaccaaactc cagccaaagt cacatgccac 900
70 aaggatgcca agatccgcgt gcaagccaga gaccgctact acagctcatc ttggagcgaa 960
71 tgggcatctg tgccctgcag ttag                                     984

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73 <210> SEQ ID NO: 3

74 <211> LENGTH: 984

75 <212> TYPE: DNA

76 <213> ORGANISM: Artificial Sequence

78 <220> FEATURE:

79 <223> OTHER INFORMATION: Synthetic Sequence

81 <400> SEQUENCE: 3

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82 atgtgtcacc agcagttggt catctcttgg ttttccctgg ttttcttggc atctcccctc 60
83 gtggccatat gggaaactgga gaaaaatgtt tatgtttag aattggattg gtaccgggat 120
84 gcccctggag aaatggtggt cctcgctgt gacactcctg aagaagatgg catcacctgg 180
85 acctcagacc agagcagtgg ggtcttgggc actggcaaaa ccctgaccat ccacgtcaaa 240
86 gagtttggag atgctggcca gtacacctgt cgcaaaggag gcgcagttct gagccagtca 300
87 ctctgtctgc ttcacaaaaa ggaagatgga atttgggtcca ctgatatttt aaaggaccag 360
88 aaagaaccca aagctaagag ttttttaaaa tgtgaggcaa aggattattc tggacacttc 420
89 acctgctggt ggctgacaac aatcagtact gatttgaaat tcagtgtcaa aagcagcaga 480
90 ggctcctctg acccccagag ggtgacttgt ggagccgtta cactctctgc agagagggtc 540
91 agcatggacc acagggagta taacaagtac acagtggagt gtcaggaggg cagtgcctgc 600
92 ccctctgccg aggagagcct acccatcgag gtcgtggtgg atgctattca caagctcaag 660
93 tatgaaaact acaccagcag cttcttcac agggacatca tcaaaccgga cccacccaag 720
94 aacttgacgc tgagaccact aaagaattct cggcaggtgg aggtcaactg ggagtaccct 780
95 gacacgtgga gcaccccaca ttctacttt tccctgacgt tttgtgttca ggtccaggga 840
96 aagaacaaga gagaaaagaa actcttcacg gaccaaactc cagccaaagt cacatgccac 900
97 aaggatgcca agatccgcgt gcaagccaga gaccgctact acagctcatc ttggagcgaa 960
98 tgggcatctg tgccctgcag ttag                                     984

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101 <210> SEQ ID NO: 4

102 <211> LENGTH: 984

103 <212> TYPE: DNA

104 <213> ORGANISM: Artificial Sequence

106 <220> FEATURE:

107 <223> OTHER INFORMATION: Synthetic Sequence

109 <400> SEQUENCE: 4

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110 atgcacctc agcagttggt cgtttcctgg ttttccctgg ttttcttggc atctcccctc 60
111 gtggccatat gggaaactgga gaaaaatgtt tatgtttag aattggattg gtatcctgat 120
112 gctcctggag aaacagtggt cctcgctgt gacactcctg aagaagatgg catcacctgg 180

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113 acctcagacc agagcagtga ggtcctgggc actggcaaaa ccctgaccat ccacgtcaaa 240
114 gagtttggag atgctggcca gtacacctgt cgcaaaggag gcgcagttct gagccagtca 300
115 ctctctgctgc ttcacaaaaa ggaagatgga atttgggtcca ctgatatttt aaaagaccag 360
116 aaaaagccca aaaacaagat ctttctgaaa tgtgaggcaa agaattactc cggacgtttc 420
117 acctgctggt ggctgacagc aatcagtaca gatttgaaat tcactgtcaa aagcagcaga 480
118 ggctcctctg accccaagg ggtgacttgt ggagccgtta cactctctgc agagagggtc 540
119 agcatggacc acagggagta taacaagtac acagtggagt gtcaagaggg cagtgcctgc 600
120 ccctctgccg aggagagcct acccatcgag gtcgtggtgg atgctattca caagctcaag 660
121 tatgaaaact acaccagcag gttcttcatc agggacatca tcaaaccgga cccaccaag 720
122 aacttgcaac tgagaccact aaagaattct cgacacgtgg agatcagctg ggagtacct 780
123 gacacctgga gcacccaca ttcctacttc tccctgacgt tttgtgttca ggtccagggg 840
124 aagaacaaga gagaaaagaa actcttcatg gaccaaacct cagccaaagt cacatgccac 900
125 aaggatgcca agatccgcgt gcaagccaga gaccgctacc acagctcatc ttggagcgaa 960
126 tgggcatctg tgccctgcag tttag                                     984

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128 <210> SEQ ID NO: 5

129 <211> LENGTH: 969

130 <212> TYPE: DNA

131 <213> ORGANISM: Artificial Sequence

133 <220> FEATURE:

134 <223> OTHER INFORMATION: Synthetic Sequence

136 <400> SEQUENCE: 5

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137 atgtgtcacc agcagttggt catctcttgg ttttccctgg tttttctggc atccccctc 60
138 gtggccatat gggaactgga gaaaaacgtt tatgtttag aattggactg gtaccggat 120
139 gcccctggag aaatggtggt cctcgctgt gacactcctg aagaagatgg catcacctgg 180
140 acctcagacc agagcagtga ggtcctgggc actggcaaaa ccctgaccat ccacgtcaaa 240
141 gagtttggag atgctggcca gtataacctgc cataaaggag gcaaggttct gagccgtca 300
142 ctctctgctgc ttcacaaaaa ggaagatgga atttgggtcca ctgatatttt aaaagaccag 360
143 aaagagccca aaaacaagag ctttctaaaa tgtgaggcaa agaattactc cggacgtttc 420
144 acctgctggt ggctgacgac aatcagtact gatctgacat tcagtgtcaa aagcagcaga 480
145 ggctctactg acccccatgg cgtgacatgt ggcacggcaa cgctctcaga ggacctcga 540
146 gagtataaga agtacagagt ggagtgtcag gagggcagtg cctgcccagc cgctgaggag 600
147 agcctgccta ttgaggtcgt gctggaagct gtacacaagc tcaagtatga aaactacacc 660
148 agcagcttct tcatcaggga catcatcaaa ccagaccac ccaagaacct gcaactgaga 720
149 ccattaaaga attctcggca ggtggaggtc aactgggagt accctgacac gtggagcacc 780
150 ccacattcct acttctccct gacgttttgt gttcaggtcc agggaaggaa caagagagaa 840
151 aagaaactct tcatggacca aacctcagcc aaagtcacgt gccacaagga tgccaagatc 900
152 cgcgtgcaag cccgagaccg ctactatagt tcatcctgga gcgactgggc atccgtgtcc 960
153 tgcggttag

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155 <210> SEQ ID NO: 6

156 <211> LENGTH: 975

157 <212> TYPE: DNA

158 <213> ORGANISM: Artificial Sequence

160 <220> FEATURE:

161 <223> OTHER INFORMATION: Synthetic Sequence

163 <400> SEQUENCE: 6

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164 atgtgtcacc agcagttggt catctcttgg ttttccctgg tttttctggc atctcccctc 60
165 atggccatat gggaactgaa gaaagacgtt tatgtttag aattggactg gtaccggat 120
166 gcccctggag aaatggtggt cctcgctgt gacactcctg aagaagatgg catcacctgg 180
167 acctcagacc agagcagtga ggtcctgggc actggcaaaa ccctgaccat ccacgtcaaa 240

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168 gagtttggag atgctggcca gtacacctgt cataaaggag gcacagttct gagccagtca 300
169 ctctgtctgc ttcacaaaaa ggaagatgga atttgggtcca ctgatatttt aaaagaccag 360
170 aaagagccca aaaacaagag ctttctaaag tgtgaggcaa agaattactc cggacgtttc 420
171 acctgctggt ggctgacggc aatcagtagt gatttgaaat tcaactgtcaa aagcagcaga 480
172 ggctccactg acccccgtgg cgtgacatgt ggcacggcaa cgctctcaga ggacctcga 540
173 gagtataaga agtacagagt ggagtgtcag gaggggcagt cctgcccagc cgctgaggag 600
174 agcctgcccc ttgaggctgt gctggaagct gtccacaagc tcaagtatga aaactacacc 660
175 agcagcttct tcatcagggg catcatcaaa ccagaaccac ccaagaacct gcaactgaga 720
176 ccattaaaga attctcggca cgtggagggt agctgggagt accctgacac gtggagcgcc 780
177 ccacattcct acttttccct gacgtttggt gtccagggtc agggcaggaa caagagagaa 840
178 gatagactct tcatggacca aacctcagcc aaagtcgtgt gccacaagga tgccaagatc 900
179 cgcgtgcaag ccagagaccg ctactacagc tcatcttga gcgaatgggc atctgtgtcc 960
180 ctgcagtcag tctag 975

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183 <210> SEQ ID NO: 7

184 <211> LENGTH: 990

185 <212> TYPE: DNA

186 <213> ORGANISM: Artificial Sequence

188 <220> FEATURE:

189 <223> OTHER INFORMATION: Synthetic Sequence

191 <400> SEQUENCE: 7

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193 gtggccatat gggaaactgga gaaaaacggt tatgtttagt aattggactg gtaccggat 120
194 gccctggag aaatggtggt cctcgctctg gacactcctg aagaagatgg catcacctgg 180
195 acctcagacc agagcagtga ggtcttgggc actggcaaaa ccctgaccat ccacgtcaaa 240
196 gagtttggag atgctggcca gtacacctgt cgcaaaggag gcgcagttct gagccagtca 300
197 ctctgtctgc ttcacaaaaa ggaagatgga atttgggtcca ctgatatttt aaaagaccag 360
198 aaagagccca aaaacaagat ctttctgaaa tgtgaggcaa agaattactc cggacgtttc 420
199 acctgctggt ggctgacagc aatcagtaca gatttgaaat tcaactgtcaa aagcagcaga 480
200 ggctcctctg acccccgaag ggtgacttgt ggagccgtta cactctctgc agagagggtc 540
201 agcatggacc acagggagta taacaagtac acagtggagt gtcaggaggg cagtgcctgc 600
202 cctctgccc aggagagcct accatcgag gtctgtgtgg atgctattca caagctcaag 660
203 tatgaaaact acaccagcag cttcttcac agagacatca tcaaacctga cccacccaag 720
204 aacttgcagc tgaagccatt aaagaattct cgacacgtgg agatcagctg ggagtacct 780
205 gacacctgga gcatcccaca ttcctacttt tccctgatgt ttggtgttca agttcagggc 840
206 aagaacaaga gagaaaagaa agatagactc tccgtggaca agacctcagc caaggtcgtg 900
207 tgccacaagg atgccaagat ccgcgtgcaa gccagagacc gctactacag ctcatcttgg 960
208 agcgaatggg catctgtgcc ctgcagttag 990

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210 <210> SEQ ID NO: 8

211 <211> LENGTH: 324

212 <212> TYPE: PRT

213 <213> ORGANISM: Artificial Sequence

215 <220> FEATURE:

216 <223> OTHER INFORMATION: Synthetic Sequence

218 <400> SEQUENCE: 8

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219 Met Cys His Gln Gln Leu Val Ile Ser Trp Phe Ser Leu Val Leu Leu
220 1 5 10 15
221 Ala Ser Pro Leu Met Ala Ile Trp Glu Leu Lys Lys Asp Val Tyr Val
222 20 25 30
223 Val Glu Leu Asp Trp Tyr Pro Asn Ala Pro Gly Glu Thr Val Val Leu

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224          35          40          45
225 Thr Cys Asp Thr Pro Glu Glu Asp Gly Ile Thr Trp Thr Ser Asp Gln
226          50          55          60
227 Ser Ser Glu Val Leu Gly Thr Gly Lys Thr Leu Thr Ile His Val Lys
228 65          70          75          80
229 Glu Phe Gly Asp Ala Gly Gln Tyr Thr Cys Arg Lys Gly Gly Glu Ala
230          85          90          95
231 Leu Ser Arg Ser Leu Leu Leu Leu His Lys Lys Glu Asp Gly Ile Trp
232          100          105          110
233 Ser Thr Asp Ile Leu Lys Asp Gln Lys Glu Pro Lys Asn Lys Ser Phe
234          115          120          125
235 Leu Lys Cys Glu Ala Lys Asn Tyr Ser Gly Arg Phe Thr Cys Trp Trp
236          130          135          140
237 Leu Thr Thr Ile Ser Thr Asp Leu Lys Phe Ser Val Lys Ser Ser Arg
238 145          150          155          160
239 Gly Ser Thr Asp Pro Arg Gly Val Thr Cys Gly Thr Ala Thr Leu Ser
240          165          170          175
241 Glu Asp Leu Gly Glu Tyr Lys Lys Tyr Arg Val Glu Cys Gln Glu Gly
242          180          185          190
243 Ser Ala Cys Pro Ala Ala Glu Glu Ser Leu Pro Ile Glu Val Val Leu
244          195          200          205
245 Glu Ala Val His Lys Leu Lys Tyr Glu Asn Tyr Thr Ser Ser Phe Phe
246          210          215          220
247 Ile Arg Asp Ile Ile Lys Pro Asp Pro Pro Lys Asn Leu Gln Leu Lys
248 225          230          235          240
249 Pro Leu Lys Asn Ser Arg His Val Glu Val Ser Trp Gly Tyr Pro Asp
250          245          250          255
251 Thr Trp Ser Thr Pro His Ser Tyr Phe Ser Leu Thr Phe Cys Ile Gln
252          260          265          270
253 Val Gln Gly Lys Ser Lys Arg Glu Lys Lys Asp Arg Ile Phe Thr Asp
254          275          280          285
255 Lys Thr Ser Ala Thr Val Ile Cys Arg Lys Asn Ala Lys Ile Arg Val
256          290          295          300
257 Gln Ala Arg Asp Arg Tyr Tyr Ser Ser Phe Trp Ser Glu Trp Ala Ser
258 305          310          315          320
259 Val Ser Cys Ser
263 <210> SEQ ID NO: 9
264 <211> LENGTH: 327
265 <212> TYPE: PRT
266 <213> ORGANISM: Artificial Sequence
268 <220> FEATURE:
269 <223> OTHER INFORMATION: Synthetic Sequence
271 <400> SEQUENCE: 9
272 Met Cys His Gln Gln Leu Val Ile Ser Trp Phe Ser Leu Val Phe Leu
273 1          5          10          15
274 Ala Ser Pro Leu Val Ala Ile Trp Glu Leu Glu Lys Asn Val Tyr Val
275          20          25          30
276 Val Glu Leu Asp Trp Tyr Pro Asp Ala Pro Gly Glu Met Val Val Leu
277          35          40          45

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:39; Xaa Pos. 2,3,8,15,21,27,29,40,45,49,62,67,71,78,91,95,96,99,122
Seq#:39; Xaa Pos. 125,127,130,135,139,147,153,155,163,166,172,173,174,177
Seq#:39; Xaa Pos. 178,179,180,181,182,183,184,185,186,187,188,190,196,201
Seq#:39; Xaa Pos. 211,212,213,215,226,244,251,254,255,257,264,274,275,280
Seq#:39; Xaa Pos. 281,285,286,287,288,289,291,293,297,299,301,303,305,307
Seq#:39; Xaa Pos. 309,311,315,318,321,326,327,328
Seq#:40; Xaa Pos. 2,4,6,10,11,17,22,24,27,28,30,31,34,35,36,39,40,46,48,51
Seq#:40; Xaa Pos. 54,56,58,63,69,76,91,92,98,101,102,104,120,121,124,125
Seq#:40; Xaa Pos. 136,140,148,161,162,164,167,172,177,181,186,210,212,213
Seq#:40; Xaa Pos. 218